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May 31, 2001

Mr. Roger Baker
Principal Planner
CITY OF BURBANK
275 East Olive Avenue
Burbank, California 91502

Clayton Project No. .80-98191.00

Subject: Status Report of Vapor Extraction System Operation - Lockheed-Martin
B-1 Site – February 2001 – April 2001

Dear Mr. Baker:

The following status report has been prepared for the Vapor Extraction System (VES) operation at Lockheed-Martin B-1 Site for the period between February 2001 and April 2001. It includes the following items:

- Background
- Clayton Field Activities
- Results of Laboratory Analysis
- Health Risk Assessment
- Conclusions

BACKGROUND

Alton Geoscience conducted a "Phase I" and "Phase II" of VES effluent sampling and health risk assessment for the Lockheed-Martin B-1 facility. Phase I consisted of twelve weekly health risk reports based on samples collected between September 2, 1997 and February 9, 1998. Phase II included twelve bi-weekly health risk assessments based on samples collected between February 16, 1998 and September 9, 1998. Phase III consisted of monthly sampling between October and December 1998.

Phase IV of the VES effluent sampling consists of VES effluent sample acquisition, laboratory analyses, and health risk assessments to be performed once per quarter for the remainder of the project. The first and second quarterly health risk assessments were provided by Alton in reports dated January 18, 1999 and May 24, 1999, respectively.

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Clayton conducted the third quarter sampling and risk assessment, then provided the results a report dated November 1, 1999. Six additional reports were submitted by Clayton. These reports were dated:

- November 23, 1999, which addressed the temporary shutdown of the system on October 14, 1999 for rebound testing;
- March 13, 2000, for the period following restart of the system;
- May 16, 2000 for the period through March 2000;
- March, July 12, 2000 for the period through June 2000, and
- November 17, 2000, for the period through September 2000.
- February 22, 2001, for the period through January 2001

CLAYTON FIELD ACTIVITIES

On April 20, 2001, personnel from Clayton Group Services (Clayton) met with Earth Tech personnel to conduct sampling of air emissions at the Lockheed-Martin B-1 Site VES. Clayton and Earth Tech personnel each collected an exhaust sample using an evacuated Summa canister, connected via a disposable Teflon® tube to the VES unit's sampling port.

During the sampling period, the exhaust flow rate (of 1,790 scfm) and VOC monitoring reading (of 0.92 ppm) was recorded. This VOC reading was within acceptable operating conditions for the VES. The 15 minute and 24 hour average VOC emissions rates indicated at the time were 1.0656 and 0.8640 lbs/day, respectively.

The sample collected by Clayton was delivered to Air Toxics LTD in Folsom, California for analysis by gas-chromatograph/mass spectrometry (GS/MS) in accordance with EPA Method TO-14.

During the visit, Clayton was informed that the VES system had been taken down on January 31, 2001 to perform major maintenance and relocate some fiber optic and electrical lines. The unit was restarted on April 2, and had been operating continuously since.

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RESULTS OF LABORATORY ANALYSES

The results from the TO-14 analysis of the sample taken on April 20, 2001 indicated that ten (10) compounds were present in concentrations above detection limits. Following are a list of these compounds and the concentrations indicated by the analysis:

Compound	Concentration (ppmv)
Dichlorodifluoromethane (Freon 12)	0.039
1,1-Dichloroethylene	0.064
Methylene Chloride	0.0036
Perchloroethylene (PCE)	0.32
cis-1,2-Dichloroethylene	0.0074
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.039
1,1,1-Trichloroethane	0.0095
Fluorotrichloromethane (Freon 11)	0.005
Chloroform	0.0048
Trichloroethylene (TCE)	0.54

As a quality check, the laboratory ran a duplicate analysis of the same sample. The results of the second analysis for all constituents were no more than 15% lower than the first analysis, with most constituents (including PCE and TCE) resulting in identical results. The results from the first analysis are presented in the above table.

The results indicated the concentrations of TCE and PCE are now decreasing, unlike the previous three quarters where the concentrations continued to increase (Between July 2000 and January 2001). Excepting last quarter, these concentrations are the highest since those determined from samples taken on September 17, 1997 during Phase I. Although higher than previous quarters, the exhaust flow rate, at 1,790 cubic feet per minute, is still lower than those used during and before the second quarter of 2000.

An overall VOC emission rate of 1.032 lb/day, the emissions were still well below the Conditional Use Permit (CUP) limit of 9.8 pounds per day. This result along, with the previous calculated total VOC emissions for the unit, were plotted on Figure 1. Vinyl Chloride was not detected in the sample taken. Therefore, its CUP limit of 0.14 pounds per day was not exceeded.

Mr. Roger Baker
CITY OF BURBANK
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HEALTH RISK ASSESSMENT

In accordance with the CUP, the stack concentrations of each constituent and the exhaust flow rates were used to calculate the excess cancer risk resulting from operation of the VES. The first risk calculation was to determine the risk if the unit was operated for a lifetime period of 70 years, evaluating the risk to both workers and local residents for those chemicals specified in SCAQMD Rule 1401, as adopted at the time the unit was permitted. The second risk calculation was to determine the risk to both workers and local residents for the life of the project (the 8.5 year operating period), for all detected chemicals for which carcinogenic risk factors are available.

The resulting cancer risk calculations for both conditions indicated an acceptable Maximum Individual Cancer Risk (MICR) of less than one in one million. The results from these calculations, along with the MICR results from previous calculations for the unit, are presented on Figures 2 and 3, for 70 year and 8.5 year calculations respectively.

CONCLUSIONS

Based on the results of the information gathered and samples taken on April 20, 2001, the following conclusions can be made:

VOC emissions from the VES are well below the CUP limit of 9.8 pounds per day.

Since vinyl chloride was not detected, its CUP limit of 0.14 pounds per day was not exceeded.

Excess cancer risks (MICR) were less than one in one million for workers and local residents, using both 70 year lifetime and 8.5 year operating period risk calculations.

If you have any questions or require additional information regarding this status report, please contact me at (714) 431-4142 or Gustavo Valdivia at (714) 431-4113.

Sincerely,

Kevin Cosgrove
Senior Engineer
Environmental Services

Mr. Roger Baker
CITY OF BURBANK
May 31, 2001

Reviewed by:

Gustavo Valdivia, P.E. No. 57702
Project Manager
Environmental Services

Attachments: Figure 1 - Daily VOC Emissions
Figure 2 - Human Health Risk (70 Year Lifetime)
Figure 3 - Human Health Risk (8.5 Year Operating Period)
Laboratory Report

cc: Ms. Stacey Ebner, South Coast Air Quality Management District

FIGURE 1 - DAILY VOC EMISSIONS
LOCKHEED B-1 VES
Independent Monitoring Data

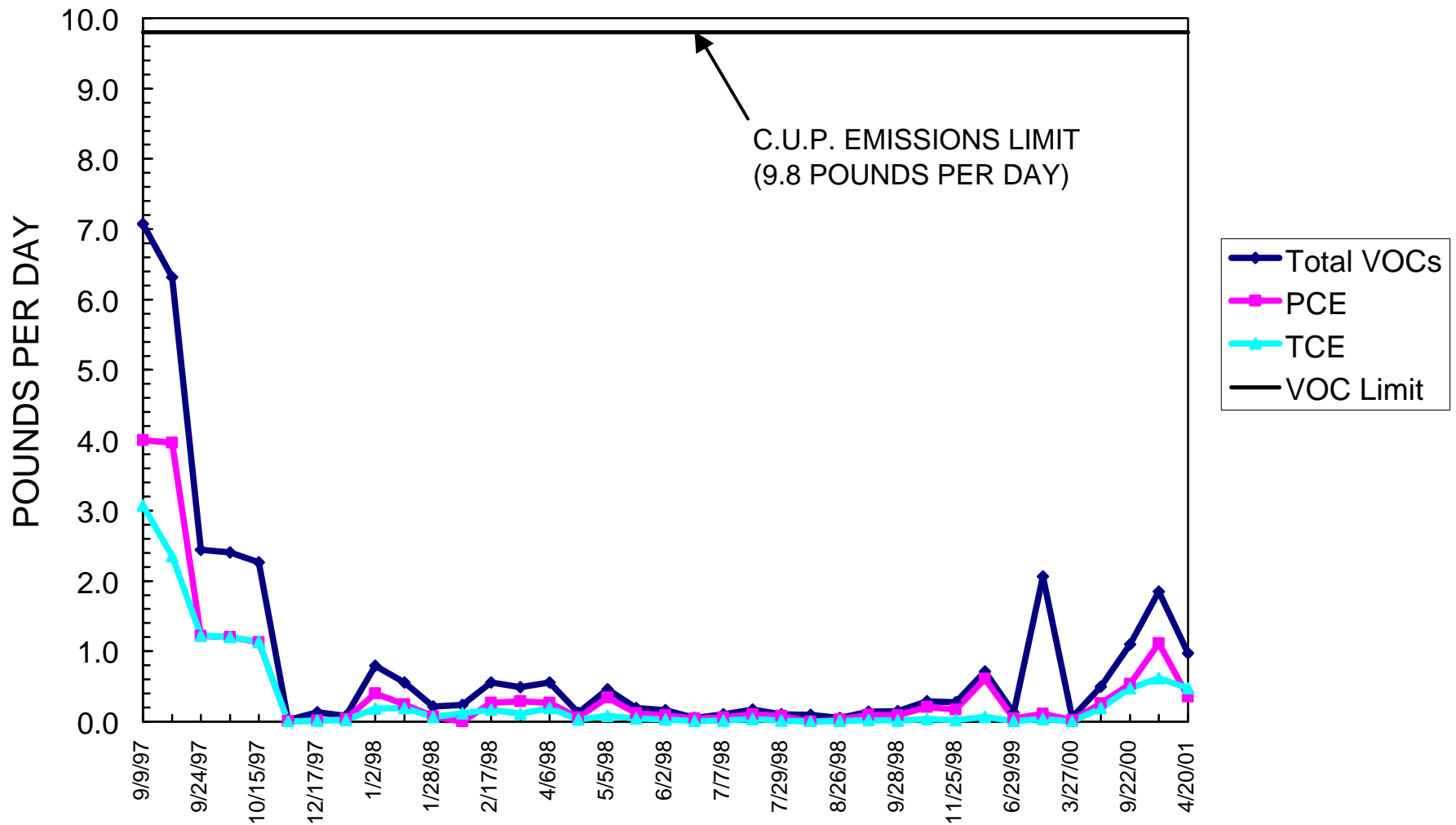


FIGURE 1

**FIGURE 2 - HUMAN HEALTH RISK
LOCKHEED B-1 VES
SCAQMD RULE 1401 CHEMICALS
HYPOTHETICAL 70 YEAR LIFETIME**

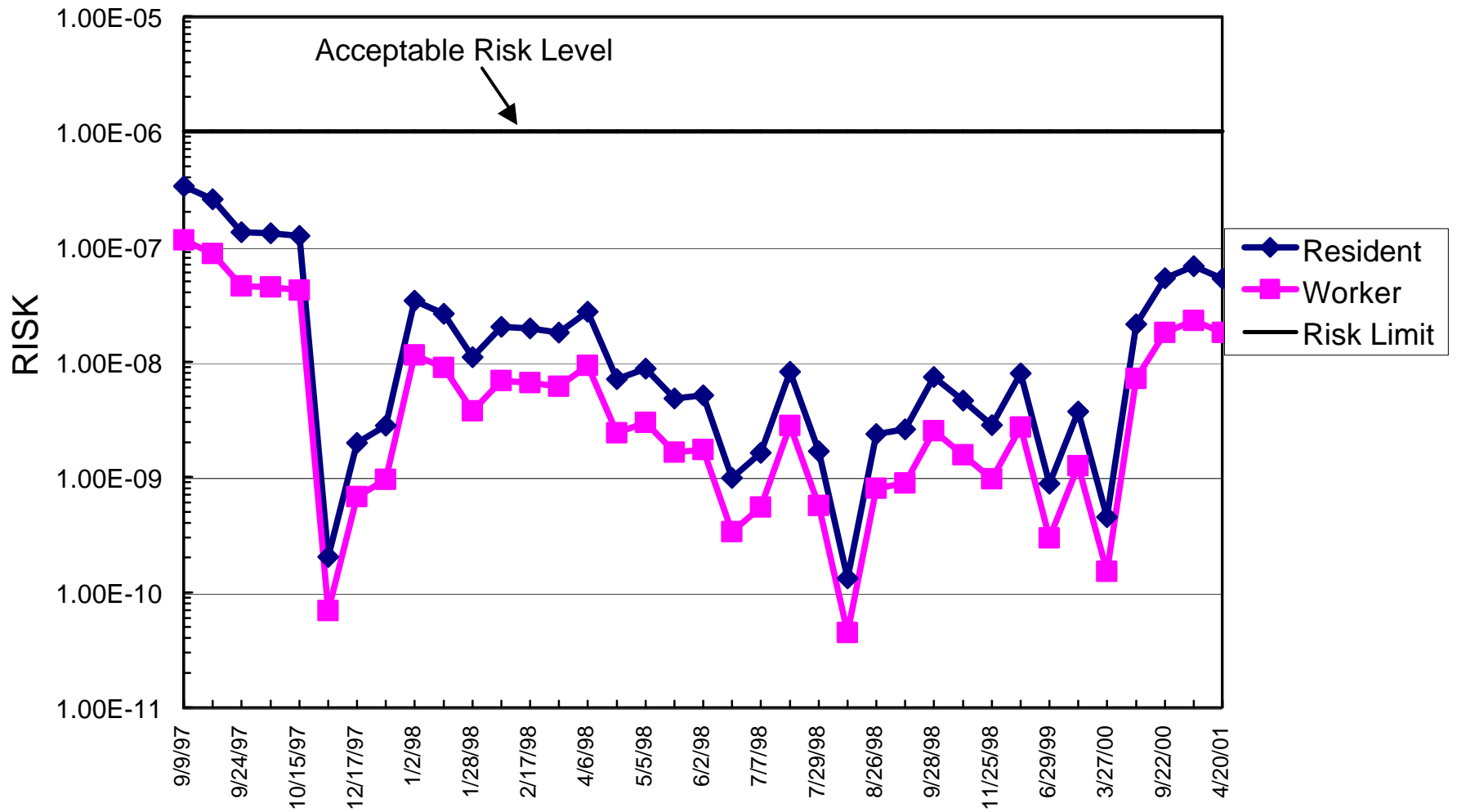


FIGURE 2

**FIGURE 3 - HUMAN HEALTH RISK
LOCKHEED B-1 VES
DURING 8.5 YEAR OPERATING PERIOD**

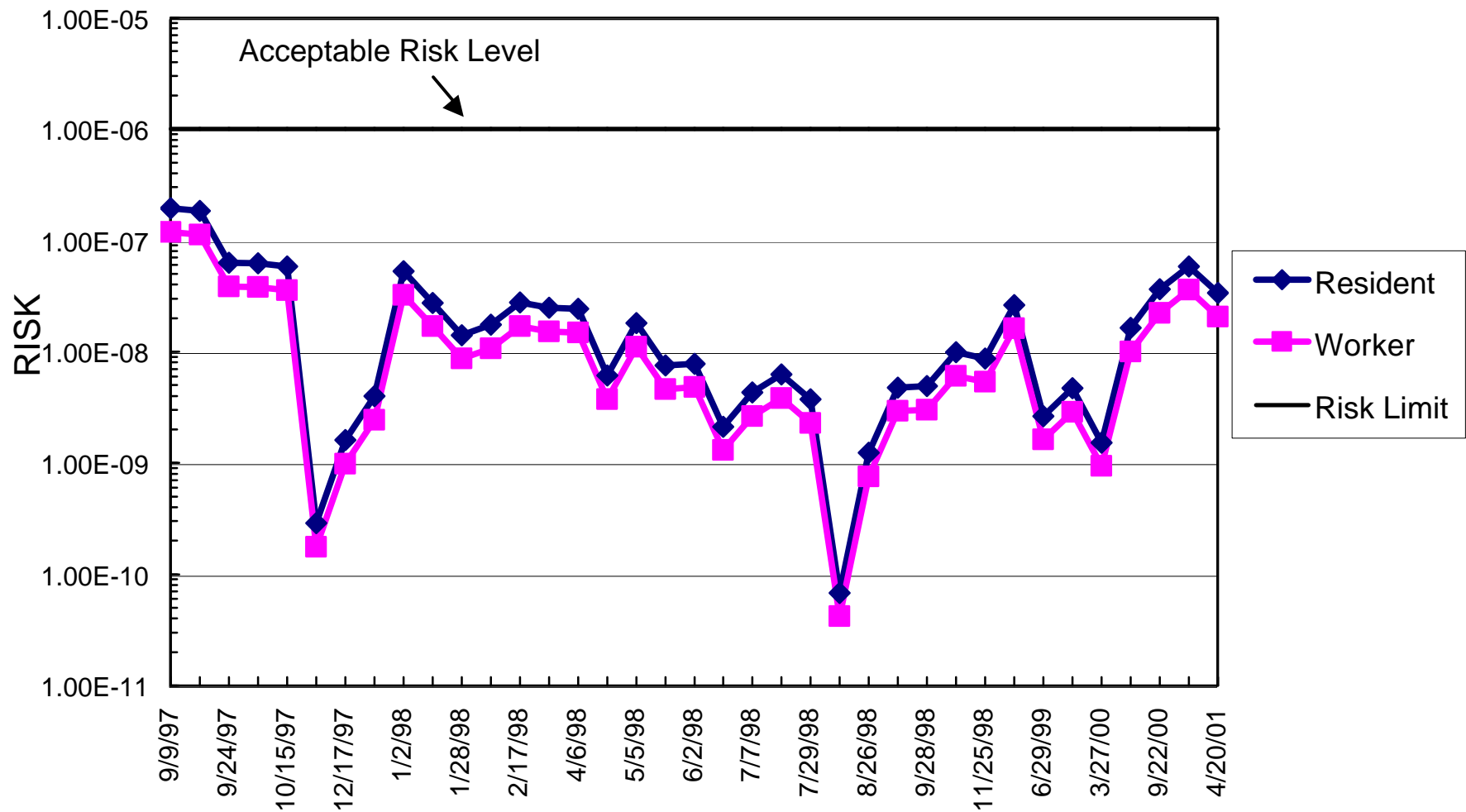


FIGURE 3

**AIR TOXICS LTD.**

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0104422

Work Order Summary

RECEIVED**MAY 10 2001**

BY: _____

CLIENT: Mr. Bill Gendron
Clayton Group Services
2611 S Harbor Boulevard #260
Santa Ana, CA 92704

BILL TO: Mr. Bill Gendron
Clayton Group Services
2611 S Harbor Boulevard #260
Santa Ana, CA 92704

PHONE: 714-431-4100

P.O. # NR

FAX: 714-825-0685

PROJECT # 80-98 191.00 City of Burbank

DATE RECEIVED: 4/23/01

DATE COMPLETED: 5/7/01

FRACTION #**NAME****TEST****RECEIPT****VAC/PRES.**

01A B1-VES-042001
01AA B1-VES-042001 Duplicate
02A Method Spike
03A Lab Blank

TO-14
TO-14
TO-14
TO-14

4.5 "Hg
4.5 "Hg
NA
NA

CERTIFIED BY: _____

Laboratory Director

DATE: 05/07/01

Certification numbers: CA ELAP - 1149, NY ELAP - 1129, UT ELAP - E-217, AZ ELAP - A70567

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 • (800) 985-9955 • FAX (916) 985-1000

LABORATORY NARRATIVE

TO-14

Clayton Environmental

Workorder# 0104422

One 6 Liter Silco Canister sample was received on April 23, 2001. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 2.0 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 2.0 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

Requirement	TO-14	APP. Modifications
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal standard recoveries.	Not specified.	Within 40% of the daily CCV internal standard area for blanks and samples.
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal calibration criteria.	Not specified.	RSD of 30% or less for standard compounds, 40% or less for non-standard and polar compounds
Continuing calibration verification criteria	Not specified.	70 - 130% for at least 90% of standard compounds, 60 - 140% for at least 80% of non-standard and polar compounds
Response factor for quantitation	Average response factor (ICAT).	Average response factor (ICAT).

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit(background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

N - The identification is based on presumptive evidence.

AIR TOXICS LTD.

SAMPLE NAME: B1-VRS-042001

ID#: 0104422-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name	Sample ID	Date of Collection		
04_Factor <td>3-15<td>Date of Analysis: 6/20/01</td></td>	3-15 <td>Date of Analysis: 6/20/01</td>	Date of Analysis: 6/20/01		
Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 12	1.6	7.9	39	200
Freon 114	1.6	11	Not Detected	Not Detected
Chloromethane	1.6	3.3	Not Detected	Not Detected
Vinyl Chloride	1.6	4.1	Not Detected	Not Detected
Bromomethane	1.6	6.2	Not Detected	Not Detected
Chloroethane	1.6	4.2	Not Detected	Not Detected
Freon 11	1.6	9.0	5.0	28
1,1-Dichloroethane	1.6	6.4	65	290
Freon 113	1.6	12	39	310
Methylene Chloride	1.6	5.6	3.9	14
1,1-Dichloroethane	1.6	6.5	Not Detected	Not Detected
cis-1,2-Dichloroethane	1.6	6.4	7.6	31
Chloroform	1.6	7.8	5.0	25
1,1,1-Trichloroethane	1.6	8.8	9.4	52
Carbon Tetrachloride	1.6	10	Not Detected	Not Detected
Benzene	1.6	5.1	Not Detected	Not Detected
1,2-Dichloroethane	1.6	6.5	Not Detected	Not Detected
Trichloroethane	1.6	8.6	540	2900
1,2-Dichloropropane	1.6	7.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.6	7.3	Not Detected	Not Detected
Toluene	1.6	6.0	Not Detected	Not Detected
trans-1,3-Dichloropropene	1.6	7.3	Not Detected	Not Detected
1,1,2-Trichloroethane	1.6	8.8	Not Detected	Not Detected
Tetrachloroethane	1.6	11	330	2200
Ethylene Dibromide	1.6	12	Not Detected	Not Detected
Chlorobenzene	1.6	7.4	Not Detected	Not Detected
Ethyl Benzene	1.6	7.0	Not Detected	Not Detected
m,p-Xylene	1.6	7.0	Not Detected	Not Detected
o-Xylene	1.6	7.0	Not Detected	Not Detected
Styrene	1.6	6.8	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.6	11	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.6	7.9	Not Detected	Not Detected
1,2,4-Trimethylbenzene	1.6	7.9	Not Detected	Not Detected
1,3-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
1,4-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
Chlorotoluene	1.6	6.3	Not Detected	Not Detected
1,2-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.6	12	Not Detected	Not Detected
Hexachlorobutadiene	1.6	17	Not Detected	Not Detected
Propylene	6.3	11	Not Detected	Not Detected
1,3-Butadiene	6.3	14	Not Detected	Not Detected
Acetone	6.3	15	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: B1-VES-042001

ID#: 0104422-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	g050124	Date of Collection:	4/29/01
Lab. Name:	3.15	Date of Analysis:	5/2/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Carbon Disulfide	5.3	20	Not Detected	Not Detected
2-Propanol	5.3	16	Not Detected	Not Detected
trans-1,2-Dichloroethane	5.3	25	Not Detected	Not Detected
Vinyl Acetate	5.3	23	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.3	19	Not Detected	Not Detected
Hexane	5.3	23	Not Detected	Not Detected
Tetrahydrofuran	5.3	19	Not Detected	Not Detected
Cyclohexane	5.3	22	Not Detected	Not Detected
1,4-Dioxane	5.3	28	Not Detected	Not Detected
Bromodichloromethane	5.3	43	Not Detected	Not Detected
4-Methyl-2-pentanone	5.3	26	Not Detected	Not Detected
2-Hexanone	5.3	26	Not Detected	Not Detected
Dibromochloromethane	5.3	55	Not Detected	Not Detected
Bromoforn	5.3	86	Not Detected	Not Detected
4-Ethyltoluene	5.3	32	Not Detected	Not Detected
Ethanol	5.3	12	9.6	18
Methyl tert-Butyl Ether	5.3	23	Not Detected	Not Detected
Heptane	5.3	28	Not Detected	Not Detected

Container Type: 5 Liter Slick Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: B1-VES-042001 Duplicate

ID#: 0104422-01AA

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	gms0125	Date of Collection:	4/20/01
Lab Name:	316	Date of Analysis:	5/20/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 12	1.6	7.9	39	200
Freon 114	1.6	11	Not Detected	Not Detected
Chloromethane	1.6	3.3	Not Detected	Not Detected
Vinyl Chloride	1.6	4.1	Not Detected	Not Detected
Bromomethane	1.6	6.2	Not Detected	Not Detected
Chloroethane	1.6	4.2	Not Detected	Not Detected
Freon 11	1.6	9.0	6.0	29
1,1-Dichloroethene	1.6	6.4	64	260
Freon 113	1.6	12	39	300
Methylene Chloride	1.6	5.6	3.6	12
1,1-Dichloroethane	1.6	6.5	Not Detected	Not Detected
cis-1,2-Dichloroethane	1.6	6.4	7.4	30
Chloroform	1.6	7.8	4.8	24
1,1,1-Trichloroethane	1.6	8.8	9.5	53
Carbon Tetrachloride	1.6	10	Not Detected	Not Detected
Benzene	1.6	5.1	Not Detected	Not Detected
1,2-Dichloroethane	1.6	6.5	Not Detected	Not Detected
Trichloroethene	1.6	8.8	540	2900
1,2-Dichloropropane	1.6	7.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.6	7.3	Not Detected	Not Detected
Toluene	1.6	6.0	Not Detected	Not Detected
trans-1,3-Dichloropropene	1.6	7.3	Not Detected	Not Detected
1,1,2-Trichloroethane	1.6	8.8	Not Detected	Not Detected
Tetrachloroethene	1.6	11	320	2200
Ethylene Dibromide	1.6	12	Not Detected	Not Detected
Chlorobenzene	1.6	7.4	Not Detected	Not Detected
Ethyl Benzene	1.6	7.0	Not Detected	Not Detected
m,p-Xylene	1.6	7.0	Not Detected	Not Detected
o-Xylene	1.6	7.0	Not Detected	Not Detected
Styrene	1.6	6.6	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.6	11	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.6	7.9	Not Detected	Not Detected
1,2,4-Trimethylbenzene	1.6	7.9	Not Detected	Not Detected
1,3-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
1,4-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
Chlorotoluene	1.6	8.3	Not Detected	Not Detected
1,2-Dichlorobenzene	1.6	9.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.6	12	Not Detected	Not Detected
Hexachlorobutadiene	1.6	17	Not Detected	Not Detected
Propylene	6.3	11	Not Detected	Not Detected
1,3-Butadiene	6.3	14	Not Detected	Not Detected
Acetone	6.3	15	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: B1-VES-042001 Duplicate

ID#: 0104422-01AA

EPA METHOD TO-14 GC/MS FULL SCAN

File Name	gbb0121	Date of Collection	10/01/01
Lab. Folder	3-15	Date of Analysis	10/01/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	6.3	20	Not Detected	Not Detected
2-Propanol	6.3	16	Not Detected	Not Detected
trans-1,2-Dichloroethene	6.3	25	Not Detected	Not Detected
Vinyl Acetate	6.3	23	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.3	19	Not Detected	Not Detected
Hexane	6.3	23	Not Detected	Not Detected
Tetrahydrofuran	6.3	19	Not Detected	Not Detected
Cyclohexane	6.3	22	Not Detected	Not Detected
1,4-Dioxane	6.3	23	Not Detected	Not Detected
Bromodichloromethane	6.3	43	Not Detected	Not Detected
4-Methyl-2-pentanone	6.3	26	Not Detected	Not Detected
2-Hexanone	6.3	26	Not Detected	Not Detected
Dibromochloromethane	6.3	55	Not Detected	Not Detected
Bromoform	6.3	66	Not Detected	Not Detected
4-Ethyltoluene	6.3	32	Not Detected	Not Detected
Ethanol	6.3	12	Not Detected	Not Detected
Methyl tert-Butyl Ether	6.3	23	Not Detected	Not Detected
Heptane	6.3	26	Not Detected	Not Detected

Container Type: 6 Liter Silco Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethene-d4	111	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0104422-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name: 0104422-02A	g8561102	Date of Collection: NA
GC Method:	1.05	Date of Analysis: 02/05

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	%Recovery
Freon 12	0.50	2.5	102
Freon 114	0.50	3.8	111
Chloromethane	0.50	1.0	108
Vinyl Chloride	0.50	1.3	100
Bromomethane	0.50	2.0	101
Chloroethene	0.50	1.3	95
Freon 11	0.50	2.8	97
1,1-Dichloroethene	0.50	2.0	97
Freon 113	0.50	3.9	95
Methylene Chloride	0.50	1.8	92
1,1-Dichloroethane	0.50	2.0	97
cis-1,2-Dichloroethene	0.50	2.0	95
Chloroform	0.50	2.5	95
1,1,1-Trichloroethane	0.50	2.8	100
Carbon Tetrachloride	0.50	3.2	103
Benzene	0.50	1.8	95
1,2-Dichloroethane	0.50	2.0	82
Trichloroethene	0.50	2.7	88
1,2-Dichloropropane	0.50	2.3	89
cis-1,3-Dichloropropane	0.50	2.3	88
Toluene	0.50	1.9	107
trans-1,3-Dichloropropene	0.50	2.3	81
1,1,2-Trichloroethane	0.50	2.8	81
Tetrachloroethene	0.50	3.4	94
Ethylene Dibromide	0.50	3.9	85
Chlorobenzene	0.50	2.5	97
Ethyl Benzene	0.50	2.2	90
m,p-Xylene	0.50	2.2	102
o-Xylene	0.50	2.2	104
Styrene	0.50	2.2	100
1,1,2,2-Tetrachloroethane	0.50	3.5	88
1,3,5-Trimethylbenzene	0.50	2.5	94
1,2,4-Trimethylbenzene	0.50	2.5	93
1,3-Dichlorobenzene	0.50	3.0	94
1,4-Dichlorobenzene	0.50	3.0	94
Chlorotoluene	0.50	2.6	95
1,2-Dichlorobenzene	0.50	3.0	91
1,2,4-Trichlorobenzene	0.50	3.8	78
Hexachlorobutadiene	0.50	5.4	79
Propylene	2.0	3.5	101
1,3-Butadiene	2.0	4.6	102
Acetone	2.0	4.8	104

AIR TOXICS LTD.

SAMPLE NAME: Method Spike

ID#: 0104422-02A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	0805102	Date of Collection: NA
Lab Name:	010	Date of Analysis: 01/01

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	%Recovery
Carbon Disulfide	2.0	8.3	100
2-Propanol	2.0	5.0	105
trans-1,2-Dichloroethene	2.0	8.0	96
Vinyl Acetate	2.0	7.2	110
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	98
Hexane	2.0	7.2	111
Tetrahydrofuran	2.0	6.0	96
Cyclohexane	2.0	7.0	106
1,4-Dioxane	2.0	7.3	84
Bromodichloromethane	2.0	14	85
4-Methyl-2-pentanone	2.0	6.3	94
2-Hexanone	2.0	8.3	88
Dibromochloromethane	2.0	17	85
Bromoform	2.0	21	93
4-Ethyltoluene	2.0	10	101
Ethanol	2.0	3.8	109
Methyl tert-Butyl Ether	2.0	7.3	89
Heptane	2.0	8.3	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	103	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0104422-03A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name	gsm011	Date of Collection: NA		
Lab Factor	1.00	Date of Analysis: 02/07		
Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Chloromethane	0.50	1.0	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Ethylene Dibromide	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.50	3.8	Not Detected	Not Detected
Hexachlorobutadiene	0.50	5.4	Not Detected	Not Detected
Propylene	2.0	3.5	Not Detected	Not Detected
1,3-Butadiene	2.0	4.5	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0184422-034

EPA METHOD TO-14 GC/MS FULL SCAN

Reference:	g880411	Date of Collection: NA
Dr. Factor:	1.00	Date of Analysis: 3/1/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Dioxide	2.0	8.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Hexane	2.0	7.2	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
Cyclohexane	2.0	7.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Dibromochloromethane	2.0	17	Not Detected	Not Detected
Bromoforn	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.0	7.3	Not Detected	Not Detected
Heptane	2.0	8.3	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	97	70-130



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CHAIN-OF-CUSTODY RECORD

No. 121967

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